

ANALOX GL5

Fast Multiassay Analyzer



- **Rapid determination of:**
 - Glucose
 - Lactate
 - Alcohol
 - Uric Acid
 - Cholesterol
- **Result 20 seconds after injection**
- **Microlitre sample (2.5 - 10µl)**
- **Simple YES/NO operation**
- **Word display for user guidance and self-test functions**
- **Whole-blood samples for Glucose and Lactate**
- **Fully sterilizable pathways**
- **Compact system (only 3.8Kg)**
- **RS232 interface plus software option**



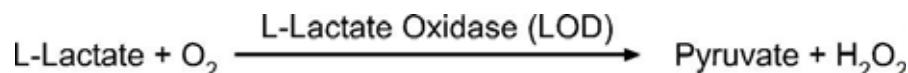
Fully portable model with internal rechargeable battery

A compact, simple-to-operate analyzer for the ultra-rapid analysis of the five most important direct enzymatic oxygen-rate assays. Application areas include clinical research, routine biochemistry and sports science.

Analytical Principle

In oxidase enzyme reactions, the analyzer measures the rate of oxygen uptake and under the appropriate controlled conditions, this is directly proportional to the analyte concentration.

Example: Lactate in whole-blood or plasma:



Operation

After calibration with a standard of the selected metabolite, the simple injection of a sample is all that is needed to obtain a result and prepare the analyzer for the next analysis. Sample injection via an accurate positive displacement pipette triggers the complete analytical cycle and a hard-copy result is then printed within 20 seconds.

Samples can be whole-blood (for key analytes such as lactate and glucose), plasma, serum or other biological fluids. Analyses are menu-driven via the 32-character display which guides the operator through the complete analytical procedure. Subsidiary menus are reached via the YES and NO buttons which enables the user to change analyses, optimize operational modes, utilize special functions and perform statistical data analysis. The display also provides self-test diagnostics in relation to electrode status and reagent performance.

Changeover between analytes is quickly and simply effected and all fluid pathways within the analyzer can be rapidly sterilized without compromising analytical performance.

Analytical Performance

	Accuracy (method comparison or recovery)	Linearity	Precision(within run)
Glucose	$y(\text{Analox}) = 0.98 \text{ (HK)} - 2.5\text{mg/dl}$ $n = 156, r = 0.998$	0 – 540mg/dl	CV = 1% @ 90mg/dl (plasma)
Lactate	$y(\text{Analox}) = 0.98 \text{ (YSI)} + 0.8\text{mg/d}$ $n = 56, r = 0.999$	0 – 90mg/dl	CV = 1.6% @ 50mg/dl (whole blood)
Alcohol	$y(\text{Analox}) = 0.97 \text{ (True Val)} + 2.1\text{mg/dl}$ $n = 89, r = 0.991$	0 – 400mg/dl	CV = 2.5% @ 85mg/dl (plasma)
Cholesterol	$y(\text{Analox}) = 0.98 \text{ (Man.Enz)} + 1.5\text{mg/dl}$ $n = 142, r = 0.988$	0 – 400mg/dl	CV = 1% @ 200mg/dl (plasma)
Uric Acid	$y(\text{Analox}) = 1.02 \text{ (PTA)} + 0.06\text{mg/dl}$ $n = 53, r = 0.965$	0 – 13.5mg/dl	CV = 2% @ 10mg/dl (plasma)

Instrument Specifications

Method:	Enzymatic oxygen-rate
Sensor:	Clark-type amperometric oxygen electrode
Reaction Temperature:	30°C
Display:	32 character backlit LCD
Printer:	16 column dot matrix, 1 line/sec
Interface:	Serial data port, optional Windows software available
Power:	100-250V AC, 50-60Hz, 12-15V DC, 60VA
Dimensions:	23cm (width) x 29cm (depth) x 15cm (height)
Weight:	3.8Kg (Portable P-GL5 6Kg)

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